

Atty. Docket No. 572.007

**REMARKS**

Applicant and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks. Applicant intends no change in scope of the claims by the changes made by this amendment and has introduced no new matter to the specification.

The current objection to the specification is not understood. The settling limitation in Claim 1 appeared in the claim as originally filed, and as such, is part of the specification. *See* 35 U.S.C. 112, paragraph 2 ("The specification shall conclude with one or more claims ...") and MPEP § 6-8.01(o) ("... sometimes in amending the claims or in adding new claims, new terms are introduced that do not appear in the specification ..."). Furthermore, page 10, lines 15-16, of the specification provides that "[t]he undissolved components in the supercritical fluid are allowed to precipitate and settle out ...". Clarification from the Office on this matter is respectfully requested.

Claims 1-10 were pending in the instant application at the time of the outstanding Office Action. Claims 1-3 and 5-7 have been amended herein; Claim 4 has been canceled herein without prejudice. The amendments to Claim 7 include the correction of an obvious typographical error. In view of the remarks presented below, it is respectfully submitted that Claims 1-3 and 5-10 fully distinguish over the applied art.

Atty. Docket No. 572.007

Claims 1 and 6-10 stand rejected under 35 U.S.C. 102(b) in view of Beneke et al. Claims 2-5 stand rejected under 35 USC 103(a) in view of Beneke et al. Reconsideration and withdrawal of the present rejections are hereby respectfully requested.

Beneke et al. discloses a batch process for extraction of coal tar pitch using supercritical gas in conjunction with high ration subcritical entrainer. Coal tar pitch is a solid or semi-solid material at ambient temperatures. *See* [<http://www.iupac.org/goldbook/C01121.pdf> (excerpt from International Union of Pure and Applied Chemistry Goldbook (Second Edition 1997)) (copy attached hereto). Given the use of solid or semi-solid feed material, any mixing which occurs in Beneke et al. necessarily must be mechanical in nature. *See* Col. 4, line 7 ("placed in a stirred autoclave") and line 44 ("placed in a stirred 10 liter autoclave"). There is no discussion in Beneke et al. of non-mechanical mixing, as one of ordinary skill in the art understands that there must be a mechanical stirrer inside the pressure vessel for the extraction to successfully occur.

As amended, Claim 1 recites that a method of processing a fluid comprises atomizing said fluid in a supercritical fluid medium to dissolve at least one component in the fluid to be processed; applying thermal energy to said fluid; allowing undissolved components to settle; and separating said dissolved components from said supercritical fluid. It is respectfully submitted that the features just described are neither taught nor suggested by the applied art. Particularly, Beneke et al. fails to teach or suggest any atomizing presently contemplated in accordance with Claim 1. Indeed, the solid and semi-solid feed material used in Beneke et al. is not suitable for atomization.

Atty. Docket No. 572.007

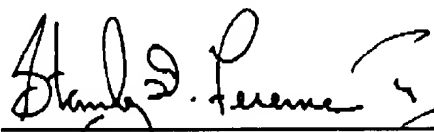
In view of the foregoing, it is respectfully submitted that Claim 1 fully distinguishes over the applied art and is thus in condition for allowance. By virtue of dependence from what is believed to be an allowable independent Claim 1, it is respectfully submitted that Claims 2-3 and 5-10 are also presently allowable. As mentioned further above, Claim 4 has been cancelled herein without prejudice.

Applicant recognizes that the Office has considered the prior art made of record but not applied against the claims to have been not sufficiently relevant as to have been applied against the claims.

In summary, it is respectfully submitted that the instant application, including Claims 1-3 and 5-10, is in condition for allowance. Notice to the effect is hereby earnestly solicited.

**OFFICIAL**

Respectfully submitted,



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Attachment

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TC 1700

**coal tar pitch**

A residue produced by distillation or heat treatment of coal tar. It is a solid at room temperature, consists of a complex mixture of numerous predominantly aromatic hydrocarbons and heterocyclics, and exhibits a broad softening range instead of a defined melting temperature.

**Notes:**

The hydrogen aromaticity in coal tar pitch (ratio of aromatic to total content of hydrogen atoms) varies from 0.7 to 0.9.

1995, 67, 485